

# **Aviation Investigation Final Report**

| Location:               | SONORA, Texas                        | Accident Number:     | FTW85LA284  |
|-------------------------|--------------------------------------|----------------------|-------------|
| Date & Time:            | July 11, 1985, 11:00 Local           | <b>Registration:</b> | N4520B      |
| Aircraft:               | Grumman AA5B                         | Aircraft Damage:     | Substantial |
| Defining Event:         |                                      | Injuries:            | 2 None      |
| Flight Conducted Under: | Part 91: General aviation - Personal |                      |             |

## **Analysis**

WHILE LANDING AT AN UNFAMILIAR STRIP, THE PLT OBSERVED A ROUGH SURFACE AT THE APCH END, AND LANDED ONE HALFWAY DOWN THE DOWN-SLOPING 2300 FT RWY. HE TRIED TO GO AROUND, BUT COULD NOT ACCELERATE ENOUGH, AND THE ACFT ROLLED THRU 2 FENCES, TREES, THEN STOPPED AGAINST ANOTHER FENCE. THE DENSITY ALT WAS 5400 FT.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

#### **Findings**

Occurrence #1: OVERRUN Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

- 1. (F) AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION ROUGH/UNEVEN
- 2. (C) JUDGMENT POOR PILOT IN COMMAND
- 3. (F) LACK OF FAMILIARITY WITH GEOGRAPHIC AREA PILOT IN COMMAND
- 4. (F) AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION DOWNHILL
- 5. (C) ALL AVAILABLE RUNWAY NOT USED PILOT IN COMMAND
- 6. (F) ANXIETY/APPREHENSION PILOT IN COMMAND
- 7. (F) AIRCRAFT PERFORMANCE, LANDING CAPABILITY DETERIORATED

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Occurrence #2: ON GROUND/WATER COLLISION WITH OBJECT Phase of Operation: TAKEOFF - ROLL/RUN

Findings

8. OBJECT - FENCE

9. (C) ABORTED LANDING - DELAYED - PILOT IN COMMAND

# **Factual Information**

### **Pilot Information**

| Certificate:              | Private   | Age:                              | 32,Male            |
|---------------------------|---|-----------------------------------|--------------------|
| Airplane Rating(s):       | Single-engine land  | Seat Occupied:                    | Left               |
| Other Aircraft Rating(s): | None  | Restraint Used:                   |                    |
| Instrument Rating(s):     | None  | Second Pilot Present:             | No                 |
| Instructor Rating(s):     | None  | Toxicology Performed:             | No                 |
| Medical Certification:    | Class 3 Valid Medicalno<br>waivers/lim.   | Last FAA Medical Exam:            | September 20, 1985 |
| Occupational Pilot:       | No  | Last Flight Review or Equivalent: |                    |
| Flight Time:              | 351 hours (Total, all aircraft), 322 hours (Total, this make and model), 330 hours (Pilot In<br>Command, all aircraft), 10 hours (Last 90 days, all aircraft) |                                   |                    |

### Aircraft and Owner/Operator Information

| Aircraft Make:                   | Grumman                   | Registration:                     | N4520B          |
|----------------------------------|---------------------------|-----------------------------------|-----------------|
| Model/Series:                    | AA5B AA5B                 | Aircraft Category:                | Airplane        |
| Year of Manufacture:             |                           | Amateur Built:                    |                 |
| Airworthiness Certificate:       | Normal                    | Serial Number:                    | AA5B1060        |
| Landing Gear Type:               | Tricycle                  | Seats:                            | 4               |
| Date/Type of Last<br>Inspection: | September 21, 1984 Annual | Certified Max Gross Wt.:          | 2400 lbs        |
| Time Since Last Inspection:      |                           | Engines:                          | 1 Reciprocating |
| Airframe Total Time:             | 1340 Hrs                  | Engine Manufacturer:              | LYCOMING        |
| ELT:                             | Installed, not activated  | Engine Model/Series:              | O-360-A4K       |
| Registered Owner:                | MIKE SHELTON              | Rated Power:                      | 180 Horsepower  |
| Operator:                        |                           | Operating Certificate(s)<br>Held: | None            |
| Operator Does Business As:       |                           | Operator Designator Code:         |                 |

### Meteorological Information and Flight Plan

|   |                              |   | 6            |
|---|------------------------------|---|--------------|
| Conditions at Accident Site:            | Visual (VMC)                 | Condition of Light:                     | Day          |
| <b>Observation Facility, Elevation:</b> | SJT                          | Distance from Accident Site:            |              |
| Observation Time:                       | 10:48 Local                  | Direction from Accident Site:           |              |
| Lowest Cloud Condition:                 | Clear                        | Visibility                              | 20 miles     |
| Lowest Ceiling:                         | None                         | Visibility (RVR):                       |              |
| Wind Speed/Gusts:                       | /                            | Turbulence Type<br>Forecast/Actual:     | /            |
| Wind Direction:                         | 0°                           | Turbulence Severity<br>Forecast/Actual: | /            |
| Altimeter Setting:                      |                              | Temperature/Dew Point:                  | 32°C / -18°C |
| Precipitation and Obscuration:          | No Obscuration; No Precipita | ation                                   |              |
| Departure Point:                        | ODESSA , TX (E02 )           | Type of Flight Plan Filed:              | None         |
| Destination:                            |                              | Type of Clearance:                      | None         |
| Departure Time:                         | 00:01 Local                  | Type of Airspace:                       | Class G      |

# **Airport Information**

| Airport:             | TEXAS A&M EXP. RESEARCH 86R | Runway Surface Type:      | Dirt;Grass/turf           |
|----------------------|-----------------------------|---------------------------|---------------------------|
| Airport Elevation:   | 2277 ft msl                 | Runway Surface Condition: | Dry                       |
| Runway Used:         | 16                          | IFR Approach:             | None                      |
| Runway Length/Width: | 2065 ft / 60 ft             | VFR Approach/Landing:     | Full stop;Traffic pattern |

# Wreckage and Impact Information

| Crew Injuries:         | 1 None | Aircraft Damage:        | Substantial                |
|------------------------|--------|-------------------------|----------------------------|
| Passenger<br>Injuries: | 1 None | Aircraft Fire:          | None                       |
| Ground Injuries:       | N/A    | Aircraft Explosion:     | None                       |
| Total Injuries:        | 2 None | Latitude,<br>Longitude: | 30.570951,-100.639015(est) |

#### **Administrative Information**

| Investigator In Charge (IIC):        | Daugherty, J                                 |  |
|--------------------------------------|--|--|
| Additional Participating<br>Persons: | OWEN RUSSELL; SAN ANTONIO , TX               |  |
| Original Publish Date:               |  |  |
| Last Revision Date:                  |  |  |
| Investigation Class:                 | <u>Class</u>                                 |  |
| Note:                                |  |  |
| Investigation Docket:                | https://data.ntsb.gov/Docket?ProjectID=21797 |  |

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available here.